

AMENDMENT IN THE SPECIFICATION

1. On page 1, underneath the title, before the Claim of Priority section, please insert the following paragraph:

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a divisional application of U.S. Patent Application Serial No. 09/947,752 filed on 7 September 2001. This related application is relied on and incorporated herein by references in its entirety.

2. Please amend the paragraph [0001] of page 1, to read as follows:

[0001] This application makes reference to, incorporates the same herein, and claims all benefits accruing under 35 U.S.C. §119 and §120 from my applications entitled *KIMCHI REFRIGERATOR AND CONTROL METHOD THEREOF* filed with the Korean Industrial Property Office on 26 March 2001 and there duly assigned Serial No. 2001-15720.

3. Please amend paragraph [0003] as follows:

[0003] Generally, a refrigerator is an apparatus which can maintain freshness of food by keeping a chamber at a predetermined cooling temperature, preventing the food from being spoiled. ~~Recently,~~ [[a]] A kimchi refrigerator is also known as a kind of refrigerator, capable of exclusively preserving

food such as ~~kimch~~ kimchi, etc., requiring ripening and cooling.

4. Please amend paragraph [0011] as follows:

[0011] In addition, because the ~~only one~~ sensor is installed in the space for the foaming material between the outer casing and the inner casing, it is impossible to repair or to replace the sensor when the sensor is out of order.

5. Please amend paragraph [0018] as follows:

[0018] Desirably, the first and second temperature limits are different ~~each other~~.

6. Please amend paragraph [0020] as follows:

[0020] Preferably, the controller controls the temperature adjuster to allow the temperature sensed by the second temperature sensor to be within the second temperature limits, if the temperature sensed by the second temperature sensor is beyond the second temperature limits, and ~~determines whether or not~~ the temperature sensed by the first temperature sensor is within the first temperature limits, ~~[[if]]~~ the temperature adjuster controls the temperature sensed by the second temperature sensor ~~[[is]]~~ to be within the second temperature limits, ~~[[to]]~~ thereby ~~control~~ controlling the temperature ~~adjuster~~.

7. Please amend paragraph [0026] and [0027] as follows:

[0026] According to another aspect of the present invention, the above and other objects may be also achieved by the provision of a method for controlling a refrigerator comprising at least one chamber and a temperature adjuster adjusting an inner temperature of the chamber, comprising the steps of sensing the inner temperature of the chamber by means of first and second temperature sensors disposed at different positions ~~each other~~; determining whether or not the temperature sensed by at least one of the first and second temperature sensors is within predetermined temperature limits of the chamber, to thereby control the temperature adjuster.

[0027] Desirably, the first and second temperature sensors are installed in lower and upper parts of the chamber, respectively; and the predetermined ~~temperature limits~~ first and second temperature limits ~~to be~~ are compared with the temperatures sensed by the first and second temperature sensors, respectively.

8. Please amend paragraph [0029] as follows:

[0029] Preferably, the first and second temperature limits are different ~~each other~~.

9. Please amend paragraph [0031] as follows:

[0031] The method further comprises the steps of controlling the temperature adjuster to allow the temperature sensed by the second temperature sensor to be within the second temperature limits, if the temperature sensed by the second temperature sensor is beyond the second temperature limits, and determining whether or not the temperature sensed by the first temperature sensor is within the

first temperature limits, [[if]] the temperature sensed by the second temperature sensor is controlled by the temperature adjuster to be within the second temperature limits, ~~to thereby control the temperature adjuster.~~

10. Please amend paragraph [0050] as follows:

[0050] The cooling system 40 is comprised of a compressor 41 installed in the component chamber 17, a condenser ~~(not shown)~~ 42 condensing a refrigerant from the compressor 41, an evaporator 43 cooling the chamber 20 by evaporating the refrigerant from the condenser ~~(not shown)~~ 42, a valve ~~(not shown)~~ 44 adjusting the amount of the refrigerant supplied to the evaporator 43 from the compressor 41, etc.

11. Please amend paragraph [0059] as follows:

[0059] Here, the temperature limits according to the predetermined set up operation mode programmed into the controller 70 are set on the basis of the central region of the chamber 20. In this case, the temperature limits of the first and second temperature sensors 61 and 63 may be equal or different from each other, according to installation positions thereof.

12. Please amend paragraph [0064] and [0065] as follows:

[0064] That is, the controller 70 allows the first sensor indicator 35 to indicate the abnormality of the first temperature sensor 61 (S101), and allows the second temperature sensor 63 to sense the inner temperature of the chamber 20 (S102). Next, the controller 70 compares the inner temperature

of the chamber 20 sensed by the second temperature sensor 63 with a second lower temperature limit (S103), and prevents the inner temperature of the chamber 20 from lowering below the second lower temperature limit by turning off the cooling system 40 such as the compressor 41, the valve ~~(not shown)~~ 44, etc., if the inner temperature of the chamber 20 sensed by the second temperature sensor 63 is lower than the second lower temperature limit (S104).

[0065] Next, the controller 70 compares the inner temperature of the chamber 20 sensed by the second temperature sensor 63 with the second lower temperature limit (S103). Then, the controller 70 determines whether the inner temperature of the chamber 20 sensed by the second temperature sensor 63 is higher than a second upper temperature limit, if the inner temperature of the chamber 20 sensed by the second temperature sensor 63 is higher than the second lower temperature limit (S105). If the inner temperature of the chamber 20 is higher than the second upper temperature limit, the controller 70 prevents the inner temperature of the chamber 20 from raising above the second upper temperature limit by turning on the cooling system 40 such as the compressor 41, the valve ~~(not shown)~~ 44, etc. (S106).

13. Please amend paragraph [0068] and [0069] as follows:

[0068] That is, the controller 70 allows the second sensor indicator 37 to indicate the abnormality of the second temperature sensor 63 (S201), and allows the first temperature sensor 61 to sense the inner temperature of the chamber 20 (S202). Next, the controller 70 compares the inner temperature of the chamber 20 sensed by the first temperature sensor 61 with a first lower temperature limit (S203), and prevents the inner temperature of the chamber 20 from lowering below the first lower

temperature limit by turning off the cooling system 40 such as the compressor 41, the valve (~~not shown~~) 44, etc., if the inner temperature of the chamber 20 sensed by the first temperature sensor 61 is lower than the first lower temperature limit (S204).

[0069] The controller 70 compares the inner temperature of the chamber 20 sensed by the first temperature sensor 61 with the first lower temperature limit (S203). The controller 70 determines whether the inner temperature of the chamber 20 sensed by the first temperature sensor 61 is higher than a first upper temperature limit, if the inner temperature of the chamber 20 sensed by the first temperature sensor 61 is higher than the first lower temperature limit (S205). If the inner temperature of the chamber 20 is higher than the first upper temperature limit, the controller 70 prevents the inner temperature of the chamber 20 from raising above the second upper temperature limit by turning on the cooling system 40 such as the compressor 41, the valve (~~not shown~~) 44, etc. (S206).

14. Please amend paragraph [0073] and [0074] as follows:

[0073] In order to determine whether the inner temperature of the chamber 20 sensed by the second temperature sensor 63 is beyond the second temperature limits, the controller 70 compares the inner temperature of the chamber 20 sensed by the second temperature sensor 63 with the second lower temperature limit (S07), and prevents the inner temperature of the chamber 20 from lowering below the second lower temperature limit by turning off the cooling system 40 such as the compressor 41, the valve (~~not shown~~) 44, etc., if the inner temperature of the chamber 20 sensed by the second temperature sensor 63 is lower than the second lower temperature limit (S08).

[0074] Then, the controller 70 compares the inner temperature of the chamber 20 sensed by the

second temperature sensor 63 with the second lower temperature limit (S07), and then determines whether the inner temperature of the chamber 20 sensed by the second temperature sensor 63 is higher than the second upper temperature limit, if the inner temperature of the chamber 20 sensed by the second temperature sensor 63 is higher than the second upper temperature limit (S09). If the inner temperature of the chamber 20 is higher than the second upper temperature limit, the controller 70 prevents the inner temperature of the chamber 20 from raising above the second upper temperature limit by turning on the cooling system 40 such as the compressor 41, the valve (~~not shown~~) 44, etc. (S10).

15. Please amend paragraph [0077] and [0078] as follows:

[0077] If the inner temperature of the chamber 20 sensed by the second temperature sensor 63 is the equal to the second upper or lower temperature limit in the step of S06, the controller 70 determines that the inner temperature of the chamber 20 is stable, and controls the inner temperature of the chamber 20 by means of the first temperature sensor 61 after moving to the step of S203. That is, if the inner temperature of the chamber 20 sensed by the second temperature sensor 63 is equal to the second upper or lower temperature limit in the step of S06, the controller 70 compares the inner temperature of the chamber 20 sensed by the first temperature sensor 61 with the first lower temperature limit. If the inner temperature of the chamber 20 sensed by the first temperature sensor 61 is lower than the first lower temperature limit (S203), the controller 70 turns off the cooling system 40 such as the compressor 41 and/or the valve (~~not shown~~) 44, and prevents the inner temperature of the chamber 20 from lowering below the first lower temperature limit (S204).

[0078] Then, the controller 70 compares the inner temperature of the chamber 20 sensed by the first temperature sensor 61 with the first lower temperature limit in the step of S203, and then compares the inner temperature of the chamber 20 sensed by the first temperature sensor 61 with the first upper temperature limit, if the inner temperature of the chamber 20 sensed by the first temperature sensor 61 is higher than the first upper temperature limit (S205). If the inner temperature of the chamber 20 is higher than the first upper temperature limit, the controller 70 prevents the inner temperature of the chamber 20 from raising above the first upper temperature limit by turning on the cooling system 40 such as the compressor 41 and/or the valve ~~(not shown)~~ 44, etc. (S206). Thereafter, the controller 70 returns the procedure for controlling the temperature to the step of S01. Thus, it is possible to accurately and promptly keep the inner temperature of the chamber 20 under the cooling mode.

16. Please amend paragraph [0081] as follows:

[0081] Thus, the inner temperature of the chamber can be effectively controlled by driving the temperature adjuster, depending upon comparing the predetermined upper and lower temperature limits with the temperature sensed by at least one of the first and second temperature sensors, the first and second temperature sensors being disposed in different positions ~~each other~~, and sense the inner temperature of the chamber. Also, if one of the sensors is abnormal, the other sensor controls the temperature adjuster. Where the second temperature sensor is out of order, it is possible to replace and repair the second temperature sensor.